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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/631,957	08/01/2003	Mark C. Smith	44219	2530

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EXAMINER	
RODRIGUEZ, JOSEPH C	

ART UNIT	PAPER NUMBER
3653	

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DATE MAILED: 09/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/631,957	SMITH, MARK C.	
	Examiner	Art Unit	
	Joseph C. Rodriguez	3653	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-25* is/are pending in the application.

4a) Of the above claim(s) *1-16* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *17-25* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *01 August 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *12/23/03;4/8/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

EA

DETAILED ACTION

Election/Restrictions

Applicant's election with traverse of claims 17-25 in the reply filed on 7/20/05 is acknowledged. The traversal is on the grounds that because the search fields overlap that no serious burden exists for examiner. This is not found persuasive as the search fields are not identical and Applicant has set forth multiple apparatus as well as multiple method claim groupings that require separate searches spanning multiple classes, thus, without restriction, the application clearly presents a serious burden.

The requirement is still deemed proper and is therefore made FINAL.

Claims 1-16 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected claim grouping, there being no allowable generic or linking claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 17-18 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Abbott et al. ("Abbott")(US 5,411,142) (Fig. 1; col. 5, ln. 28-col. 6, ln. 58 teaching use of forced air to create venturi effect to pull materials through separator).

Claims 17-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Maxwell et al. ("Maxwell")(US 2,328,568).

Regarding claims 17-18, these claims are clearly anticipated (Fig. 1).

Regarding claim 19, Maxwell teaches the heavier material collected at the bottom of the separating apparatus (Fig. 1, see top of the conveyor), wherein the times at which the conveyor is operated can be regarded as the "releasing" of the collected materials at a predetermined interval of time.

Claims 17-18, 20-21, 23-25 are rejected under 35 U.S.C. 102(b) as being anticipated by Neuman et al. ("Neuman")(US 1,912,910).

Neuman (Fig. 1) teaches a method for separating mixed particulate material into particles of at least four different specific gravities, comprising:

providing a first flow of air from an air flow source (5) through a first mixed particulate material separating apparatus, whereby mixed particulate material enters the first mixed particulate material separating apparatus (near 9);

separating initially the mixed particulate material into a first group and a second group of mixed particulate material by the vacuum pulling at least a portion of the first group of mixed particulate material up and out of the first mixed particulate material separating apparatus (top of 7), and allowing the second group of mixed particulate material to fall from the first mixed particulate material separating apparatus (bottom of 7 near 15);

providing a second flow of air from an air flow source through a second mixed

particulate material separating apparatus, whereby the second group of mixed particulate material enters the second mixed particulate material separating apparatus (near 16);

separating secondly the second group of particulate material into a third and fourth group of mixed particulate material, by the vacuum pulling the third group of mixed particulate material up and out of the second mixed particulate material separating apparatus, and allowing the fourth group of mixed particulate material to fall from the mixed particulate material separating apparatus (near 16);

providing a third flow of air from an air flow source through a third mixed particulate material separating apparatus (18), whereby the fourth group of mixed particulate material enters the third mixed particulate material separating apparatus; and separating thirdly the fourth group of particulate material into a fifth and sixth group of mixed particulate material, and allowing the sixth group of mixed particulate material to fall from the mixed particulate material separating apparatus (near 18); and transporting the initially separated material to a second discharge tube (14) and a hopper (15). Here, as Neuman teaches a blower (5) in a closed loop system, the blower can be regarded as causing a pressure differential (i.e., vacuum) that pulls the material through the system. Further, the serial stratifiers are interpreted as separating the particles into at least four different specific gravities as claimed.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 17-18, 20-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Neuman in view of Abbott et al. ("Abbott")(US 5,411,142) and Maxwell et al. ("Maxwell")(US 2,328,568).

Neuman as set forth above teaches all that is claimed except for teaching creating a vacuum using a venturi effect created by forced air. Further, under an alternative interpretation, the mere use of a vacuum to pull the materials through the system may not be regarded as present. The mere use of a vacuum, however, is well known in the separating arts. For instance, Maxwell teaches a vertical stratifier using a suction pump (17) to pull the materials (Fig. 1). Thus, the suction pump can be regarded as an equivalent in the separating arts to the blower taught by Neuman. See MPEP 2144.06. Similarly, Abbott teaches a stratifier that uses an airflow amplifier (i.e., forced air) to pull particles through for separation and also expressly teaches that blowers and vacuums are equivalent airflow control means in the separating arts (Fig. 1; col. 5, ln. 28-col. 6, ln. 58 showing use of forced air to create venturi effect). Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the invention of Neuman as taught by Maxwell

and Abbott as the use of suction is a well known equivalent for conveying materials through a separator.

Claims 20-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abbott et al. ("Abbott")(US 5,411,142) in view of Neuman and legal precedent.

Abbott as set forth above teaches all that is claimed except for expressly teaching transporting the materials through a second and third separator and separating the materials into at least six groups of material. Legal precedent, however, already establishes that the mere duplication of a known feature is not a basis for patentability. See MPEP 2144.04. That is, legal precedent establishes that it is well known to duplicate the separator taught by Abbott and place it in series to obtain the claimed features. In fact, Neuman expressly teaches sending materials through a second, third, and even a fourth, separator in series to obtain materials of varying specific gravities (see Fig. 1; p. 2, ln. 65 et seq.). Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the invention of Abbott as taught by Neuman and legal precedent in order to obtain a finer separation.

Conclusion

Any references not explicitly discussed above but made of record are considered relevant to the prosecution of the instant application.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Joseph C Rodriguez** whose telephone number is **571-272-6942** (M-F, 9 am – 6 pm, EST).

The **Official** fax phone number for the organization where this application or proceeding is assigned is **571-273-8300**.

The examiner's **UNOFFICIAL Personal fax number** is **571-273-6942.**

Further, information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system.

Status information for published applications may be obtained from either Private PMR or Public PAIR. Status information for unpublished applications is available through Private PMR only. For more information about the PAIR system, see

http://pair-direct.uspto.gov

Should you have questions on access to the Private PMR system, contact the Electronic Business Center (EBC) at **866-217-9197** (Toll Free).

Alternatively, inquiries of a general nature or relating to the status of this application or proceeding can also be directed to the **Receptionist** whose telephone number is **571-272-6584**. Further, the supervisor's contact information is Donald Walsh, 571-272-6944.

Signed by Examiner Joseph Rodriguez

Jcr

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August 31, 2005